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Search Results -

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IBM Technical Disclosure Bulletins

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Search History

DATE: Saturday, February 10, 2007 [Purge Queries](#) [Printable Copy](#) [Create Case](#)**Set Name Query**

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Hit CountSet Name
result set*DB=USPT; PLUR=YES; OP=OR*

<u>L10</u>	L9 and l8	1	<u>L10</u>
<u>L9</u>	L7 and (6-dEB)	61	<u>L9</u>
<u>L8</u>	kealey.in.	23	<u>L8</u>
<u>L7</u>	starter unit and (atoAD)	31770	<u>L7</u>
<u>L6</u>	atoC	87	<u>L6</u>
<u>L5</u>	atoAD	0	<u>L5</u>

DB=PGPB; PLUR=YES; OP=OR

<u>L4</u>	L2 and (atoC)	1	<u>L4</u>
<u>L3</u>	L2 and (atoAD)	1	<u>L3</u>
<u>L2</u>	20040096946	1	<u>L2</u>

DB=USPT; PLUR=YES; OP=OR

<u>L1</u>	6627427.pn.	1	<u>L1</u>
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END OF SEARCH HISTORY

Hit List

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Search Results - Record(s) 1 through 1 of 1 returned.

1. Document ID: US 7011959 B1

L10: Entry 1 of 1

File: USPT

Mar 14, 2006

US-PAT-NO: 7011959

DOCUMENT-IDENTIFIER: US 7011959 B1

TITLE: Heterologous production of polyketides

DATE-ISSUED: March 14, 2006

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Santi; Daniel	San Francisco	CA		US
Peck; Larry	San Carlos	CA		US
Dayem; Linda	Belmont	CA		US
Kealey; James	San Rafael	CA		US

US-CL-CURRENT: 435/76; 435/252.33

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Terms	Documents
L9 and L8	1

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TI 6-Deoxyerythronolide B analogue production in Escherichia coli through metabolic pathway engineering.
AB The erythromycin precursor polyketide 6-deoxyerythronolide B (6-dEB) is produced from one propionyl-CoA starter unit and six (2S)-methylmalonyl-CoA extender units. In vitro studies have previously demonstrated that the loading module of 6'-deoxyerythronolide B synthase (DEBS) exhibits relaxed substrate specificity and is able to accept butyryl-CoA, leading to the production of polyketides with butyrate starter units. We have shown that we can produce butyryl-CoA at levels of up to 50% of the total CoA pool in Escherichia coli cells that overexpress the acetoacetyl-CoA:acetyl-CoA transferase, AtoAD (EC 2.8.3.8), in media supplemented with butyrate. The DEBS polyketide synthase (PKS) used butyryl-CoA and methylmalonyl-CoA supplied in vivo by the AtoAD and methylmalonyl-CoA mutase pathways, respectively, to produce 15-methyl-6-dEB. Priming DEBS with endogenous butyryl-CoA affords an alternative and more direct route to 15-Me-6-dEB than that provided by the chemobiosynthesis method (Jacobsen, J. R., et al. (1997) Science 277, 367-369), which relies on priming a mutant DEBS with an exogenously fed diketide thioester. The approach described here demonstrates the utility of metabolic engineering in E. coli to introduce precursor pathways for the production of novel polyketides.

ACCESSION NUMBER: 2004:66331 BIOSIS
DOCUMENT NUMBER: PREV200400067066
TITLE: 6-Deoxyerythronolide B analogue production in Escherichia coli through metabolic pathway engineering.
AUTHOR(S): Kennedy, Jonathan; Murli, Sumati; Kealey, James T. [Reprint Author]
CORPORATE SOURCE: Kosan Biosciences, Inc., 3832 Bay Center Place, Hayward, CA, 94545, USA
kealey@kosan.com
SOURCE: Biochemistry, (December 9 2003) Vol. 42, No. 48, pp. 14342-14348. print.
ISSN: 0006-2960 (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 28 Jan 2004
Last Updated on STN: 28 Jan 2004

=> e kealey, j/au
E1 1 KEALEY W DAVID C/AU
E2 1 KEALEY W F/AU
E3 0 --> KEALEY, J/AU
E4 1 KEALHEIM G/AU
E5 1 KEALHOFER CATHERINE/AU
E6 3 KEALHOFER L/AU
E7 1 KEALHOFER L K/AU
E8 4 KEALHOFER LISA/AU
E9 2 KEALIHER A/AU
E10 2 KEALIHER AYNSLEY/AU
E11 7 KEALL A/AU
E12 4 KEALL C L/AU

=> d his

(FILE 'HOME' ENTERED AT 15:26:39 ON 10 FEB 2007)

FILE 'MEDLINE, BIOSIS' ENTERED AT 15:27:08 ON 10 FEB 2007
L1 2 S (6-DEB) AND (ATOAD)
E KEALEY, J/AU

=> s atoC

L2 50 ATOC

=> s atoAD
L3 3 ATOAD

=> s l2 and l3
L4 0 L2 AND L3

=> s l2 and polyketide
L5 0 L2 AND POLYKETIDE

=> s l2 and host cell
L6 0 L2 AND HOST CELL

=> d l3 ti abs ibib tot

L3 ANSWER 1 OF 3 MEDLINE on STN
TI 6-Deoxyerythronolide B analogue production in Escherichia coli through metabolic pathway engineering.
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ACCESSION NUMBER: 2003565219 MEDLINE
DOCUMENT NUMBER: PubMed ID: 14640703
TITLE: 6-Deoxyerythronolide B analogue production in Escherichia coli through metabolic pathway engineering.
AUTHOR: Kennedy Jonathan; Murli Sumati; Kealey James T
CORPORATE SOURCE: Kosan Biosciences, Inc., 3832 Bay Center Place, Hayward, California 94545, USA.
SOURCE: Biochemistry, (2003 Dec 9) Vol. 42, No. 48, pp. 14342-8.
Journal code: 0370623. ISSN: 0006-2960.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200403
ENTRY DATE: Entered STN: 16 Dec 2003
Last Updated on STN: 18 Mar 2004
Entered Medline: 17 Mar 2004

L3 ANSWER 2 OF 3 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
TI Manipulation of yeast CoA pools: Introduction of pathway for butyryl-CoA synthesis.
ACCESSION NUMBER: 2005:484954 BIOSIS
DOCUMENT NUMBER: PREV200510259209
TITLE: Manipulation of yeast CoA pools: Introduction of pathway for butyryl-CoA synthesis.
AUTHOR(S): Lee, K. Michael [Reprint Author]; Kealey, James T.; Da Silva, Nancy A.

CORPORATE SOURCE: Univ Calif Irvine, Irvine, CA 92697 USA
kklee@uci.edu

SOURCE: Abstracts of Papers American Chemical Society, (MAR 13 2005) Vol. 229, No. Part 1, pp. U189-U190.

Meeting Info.: 229th National Meeting of the American-Chemical-Society. San Diego, CA, USA. March 13 -17, 2005. Amer Chem Soc.

CODEN: ACSRAL. ISSN: 0065-7727.

DOCUMENT TYPE: Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 16 Nov 2005
Last Updated on STN: 16 Nov 2005

L3 ANSWER 3 OF 3 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
TI 6-Deoxyerythronolide B analogue production in Escherichia coli through metabolic pathway engineering.

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DOCUMENT NUMBER: PREV200400067066

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L1 2 S (6-DEB) AND (ATOAD)
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L2 50 S ATOC

L3 3 S ATOAD

L4 0 S L2 AND L3

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L5 0 S L2 AND POLYKETIDE
L6 0 S L2 AND HOST CELL

=> s l2 and starter unit
L7 0 L2 AND STARTER UNIT